

ABSTRACT

The present invention is directed to methods and compositions of endophytic fungi that confer stress tolerance in inoculated plants, including both monocots and dicots. In particular, *Curvularia* species, isolated from a host grass *Dichanthelium lanuginosum* growing in the geothermal zones of Lassen-

5 Volcanic and Yellowstone National Parks, confers such stress tolerance. Upon inoculating a target plant or plant part with endophytic fungi, the resulting plant shows stress tolerance, particularly drought and thermal tolerance.